RIDGEWAY 2-1 STATE
SE NW 2-11N-29E (893)

O

() LEASE NO. <u>STATE #13-53801</u> AREA <u>ST JOHNS</u> WELL NAME RIDGEWAY STATE #2-1 LOCATION SE NW SEC 2 TWP 11N RANGE 29E FOOTAGE 1660' FNL & 1660' FWL ELEV 6710' GR KB SPUD DATE DEPTH COMP. DATE CONTRACTOR CASING IZE DEPTH CEMENT LINER SIZE & DEPTH DRILLED BY ROTARY DRILLED BY CABLE TOOL PRODUCTIVE RESERVOIR INITIAL PRODUCTION SOURCE REMARKS FORMATION TOPS E.L. DEPTHS PROD. INTERVALS SAMPLE LOG PERFORATED INTERVALS ELECTRIC LOGS SAMPLE DESCRP. SAMPLE NO. CORE ANALYSIS APP. TO PLUG REMARKS PLUGGING REP. COMP. REPORT WATER WELL ACCEPTED BY BOND NO. 4002111 AND 4002112 BOND CO. ARIZONA BANK ON CERTIFICATES OF DEPOSIT DATE ORGANIZATION REPORT SEE PERMIT 880 BOND AMT. \$ 25,000 (SEE NOTE) CANCELLED LOC. PLAT YES WELL BOOK PLAT BOOK FILING RECEIPT 3082 DATE ISSUED 10/17/95 DEDICATION 640 ACRES API NO. 02-001-20305

(over)

PERMIT NUMBER \_

HERRETARD

STATE: ARIZONA COUNTY: APACHE API 02-001-20305 FIELD: UNNAMED

11N-29E 2 SE NW 1660 FNL 1660 FWL STATUS: AB-LOC

OPR: RIDGEWAY ARIZONA OIL

2-1 RIDGEWAY STATE

ELEV: 8710 GR (VERTICAL) PROJ DEPTH/FM: 2465 FORT APACH PERMIT #893

LOC DESCRIPTION: 1/2 E FORT APACHE CO2 DISC 3-11N-29E UNINAMED 8 1/2 MI SE ST JOHNS, AZ; LAT: 3438197 LONG: 10924888;
OPEN ADD: 1080 700 4TH AVE SW, CALGARY ALB T2P 3J4, PHONE (800) 347-0294;

COPYRIGHT 1997 PETROLEUM INFORMATION/DWIGHTS LLC

DATE 09/22/97CARD # 00001-F COR



### PERMIT TO DRILL

This constitutes the permission and authority from the

### OIL AND GAS CONSERVATION COMMISSION, STATE OF ARIZONA,

To:	RIDGEWAY	ARIZONA C	IL COR	PORATION	
TV:			OPERATOR		
	to	drill a wel	l to be	known as	
		RIDGEWAY	Y STATE	#2-1	
		(WE	LL NAME)		
located		1660' FN	L & 165	O' FWL	
Section2Town		Range	29E	АРАСНЕ	County, Arizona.
The		+/- 640	ACRES		of said
Section, Township and		and the second s			
in full compliance with	ali applicabl	e laws, stat	utes, rul	es and regulations of	
Issued this 17	day of	OCTOBER			19 <u>.95</u>
	·		OIL	AND GAS CONSERV	ATION COMMISSION
			Ву	Edsuit	DIRECTOR
				OIL & GAS PROGRAM	
PERMIT 90893				State	of Arizona

SAMPLES AND COPIES OF ALL TEST REPORTS AND LOGS ARE REQUIRED PURSUANT TO A.A.C. R12-7-121

FORM NO. 27

RECEIPT NO. 3082

A.P.I. NO. 02-001-20305

Oil & Gas Conservation Commission

Permit to Drill

ດ

CHARLESTAND !

0

	· · · · · · · · · · · · · · · · · · ·	. 1912. s	. · ·		
. APPLICATI	FOR PER	RMIT	TO DRILL OR I	RE TYPE	R
APPLICATION TO DRILL			•		DLD WELL 🗆
RIDGEWAY ARIZONA OIL C	ORPORATTON				
NAME OF COMPANY OR OPERATOR	WALDINIA TON		<del></del>	<del></del>	
1080,700 4TH AVENUE S.W.		CATO	A DSV		
Address		CAL G City			ALBERTA T2P 3J4 State
Aztec Well Service Drilling Contractor		<del></del>			
P.O. Box 100 Aztec, N	M 87410				
Address				<del></del>	
	DESCRIPTION	ON OF I	WELL AND LEASE		
Federal, State or Indian Lease Number, or if fee le			Well number		Elevation (ground)
State Lease #13-53801			2-1		6710
Nearest distance from proposed location to property or lease line:			Distance from proposed completed or applied—fo	location to ne or well on the	earest drilling, same lease:
	980 feet	.			2950 feet
Number of acres in lease:			Number of wells on lease completed in or drilling t	, including th	is well
2845.96		ł	Completed in or diffining (	_	
If lease, purchased with one or more Name	<u> </u>		Four Address		
wells drilled, from whom purchased:					
Well location (give footage from section lines)	Section	-towns	hip-range or block and s	Urvey	Dedication (Comply with Rule 105)
1660 F/NL & 1660 F/WL			11N R29E G&S.R		640.64 acres
Field and reservoir (if wildcat, so state) Wildcat Ft. Apache			County	***************************************	3
Wildcat Ft. Apache Distance in miles, and direction from nearest town	or post office		Apache		
8 miles SE of St. Johns, A	Z				
Proposed depth: 24651	Rotary or cable t	tools		1 -	te work will start
Bond Status On file	Rotary Organization Rep	port		Nov. Filing Fee o	1, 1995 0(\$25.00
425 000			attached	Attached	
Remarks: Well Name: Ridg	eway State	#2-1		<u> </u>	
l	· ·				
Ridgeway Arizona proposes	to dilli	-nis v	well according a	to the a	ttached drilling plan
	<del> </del>				
CERTIFICATE: 1, the undersigned, under the p	ensity of periods	state the	ar I am tha	Agent	ad abo
Pridocurary Aminora Oct. O.			., , , , , , , , , , , , , , , , , , ,		of the
report was prepared under my supervision and c	firection and that i	pany), a	nd that I am authorized b	y said compa priect and cor	ny to make this report; and that this molete to the best of my knowledge.
			Q0 v	050	01
,			Signature	- Crun	endyle
API # 02-001-20309	5		Onto	4 1005	,
			Date	6, 1995	
200				*** <u>**********************************</u>	
Permit Number:O33	OCT 1 7 19	995			· · · · · · · · · · · · · · · · · · ·
Approval Date:			1		ARIZONA
Approved By: 5 Leven L.	Parin	>			VATION COMMISSION

(Complete Reverse Side)

Form No. 3

File Two Capies

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

1.3

SECTION SECTION

Size of Casing

4 1/2"

7"

Weight

20#

10.5#

1. Operator shall outline the dedicated acre for both oil and gas wells on the plat.

2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.

3. ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES\_\_\_\_\_NO\_X

5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES X NO . If answer is "yes," Type of Consolidation Operating Agreement

6. If the answer to question four is "no," list all the owners and their respective interests below:

	Owner	NA OTI CODDODATION	80%	Land Description Sec 2, T11N-R29	)E
		NA OIL CORPORATION			
*	Frank L. Shogr	in	20%	Apache County,	Arizona
					CERTIFICATION
Section for the Associate County and Association (County and Association)	1660'	1660'			I hereby certify that the information above is true and complete to the best of my knowledge and belief.  Our P. Company Ridgeway Arizona Oil Corp.  Date October 6, 1995
	1660'				I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best
		<del>-</del>			of my knowledge and belief
£.	LS 13-53801		LS #13-10		SEPTEMBER 26 1995  Date Sprice Professional Engineer and/or Land Surveyor 31 9 2000 A September 2000 A Septe
63	0 330 660 990 1320	1650 1980 2310 2640'		500 1000 500 0	Certificate No. 02579
		PR	OPOSED CA	SING PROGRAM	

Sacks Cement Type Grade & Type Top Bottom Cementing Depths K-55 0 **785**¹ 785**'** 95 G Metasilicates K-55 24651 24651 298 G w/ Additives

O

880 **- 12** 890 891 0 R 29 E RIDGEWAY ARIZONA OIL COMPANY WELLS AND LOCATIONS ST. JOHNS AREA, APACHE COUNTY, ARIZONA

ດ

### **RIDGEWAY ARIZONA OIL CORPORATION DRILLING PROGNOSIS**

DATE:

October 5, 1995

WELL NAME:

Ridgeway State #2-1

WILDCAT

**LOCATION:** 

1660' FNL & 1660' FWL

Apache County, Arizona

Sec 2, T11N-R29E

**SURFACE:** 

FIELD:

State

**ELEVATION:** 

6710' (Ground)

**MINERALS**: State #13-53801

**TOTAL DEPTH:** 2465

### 1. **GEOLOGY**:

### A. FORMATION TOPS:

Richville	Surface	Ft. Apache	1480'
Chinle	30'	Base Ft. Apache	1855'
San Andres	280'	Granite Wash	2225'
Glorietta	595'	Granite	24451
Supai	765'	TOTAL DEPTH	2465'

- B: LOGGING PROGRAM: Dual Laterlog, Spectral Density and Dual Spaced Neutron from TD to surface casing, Gamma Ray from TD to surface.
- C: NATURAL GAUGES: Gauge any noticeable increases in gas or water flows. Record all gauges in Tour book and on morning reports.
- D. <u>DST</u>: No Dst's are planned but may be run if conditions warrant.

#### 2. DRILLING:

- A. MUD PROGRAM: Spud mud from surface to 750'. KCL mud system from 750' to TD.
- **BOP TESTING:** While drill pipe is in use, the pipe rams will be tested once each day. The blind rams will be tested once each trip. The drum brakes will be inspected and tested each tour. All tests and inspections will be recorded in the tour book as to time and results.

### 3. MATERIALS:

### A. CASING PROGRAM:

CASING TYPE	<b>HOLE SIZE</b>	DEPTH	CASING SIZE	WT & GRADE
Surface	8 3/4"	785'	<b>7</b> "	20# K55
Production	6 1/4"	2465'	4 1/2"	10.5# K55

VIEW I

Drilling Prognosis Ridgeway Arizona Oil Corporation Page 2

### B. FLOAT EQUIPMENT:

()

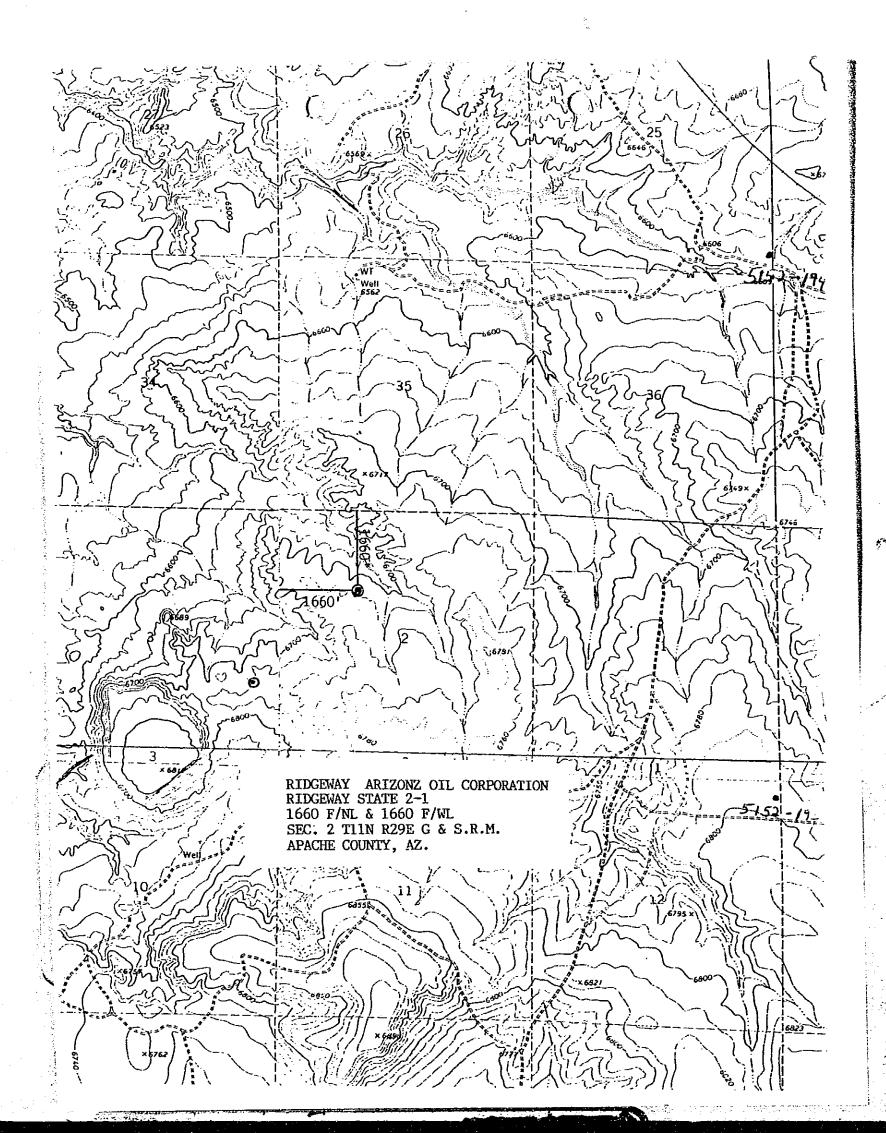
- 1. <u>SURFACE CASING:</u> 7" cement nose quide shoe with a self-fill insert float. Place float one (1) joint above the shoe and four (4) slim hole centralizers. Reciprocate pipe while cementing.
- 2. <u>PRODUCTION CASING:</u> 4 1/2" Whirler type cement nose quide shoe with a float collar one (1) joint above shoe. Place seven (7) slim hole centralizers.

#### C. Cementing:

- SURFACE: 95 sx (129 cuft) of Class "G" w/2% metasilicate and 1/4# cello-flake/sx (Yield = 2.04 cuft/sx, weight = 12.1#/gal). Use 50% excess to circulate to surface. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.
- PRODUCTION: 298 sx (367 cuft) of Class "G" with 4% gel, 6 1/4# fine gilsonite/sx and 0.8% fluid loss (Yield = 1.73 cuft/sx, weight = 13.5#/gal). Use 50% excess to circulate to surface. Run a temperature survey after 8 hours to determine TOC behind the 4 1/2" casing if cement is not circulated.

and a second

าสอบเลือดให้เรื่อง



O

] escaran

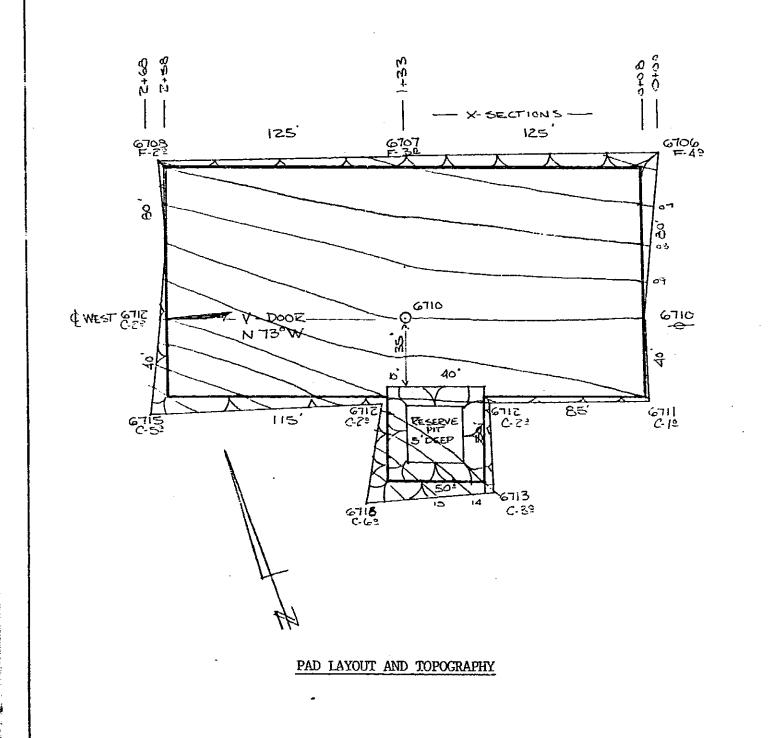
(400 SASSES)

RIDGEWAY ARIZONA OIL CORPORATI

SCALE: 1" = 50'

RIDGEWAY STATE 2-1 1660 F/NL & 1660 F/WL SEC. 2 T11N R29E G & S.R.M. APACHE COUNTY, AZ.

COUNTOUT INT. = 1'



RIDGENAY ARIZONA OIL CORPORATION

SCALE: HORZ. 1" = 50' VERT. 1' = 10'

2010 MARIES

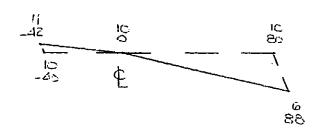
RIDGEWAY STATE 2-1 1660 F/NL & 1660 F/WL SEC. 2 T11N R29E G & S.R.M.

APACHE COUNTY, AZ.

ZERO CUT/ FILL

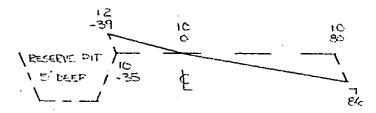
Sc+C

○+∞

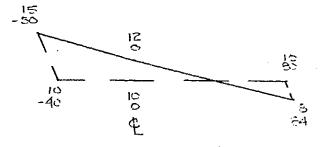


### X-SECTIONS AND VOLUMES

1+33



C+20



2468

PIT EXCAVATION......300 CU. YDS.

The second second

रा अध्यक्षि

 $\langle \hat{i} \rangle$ 

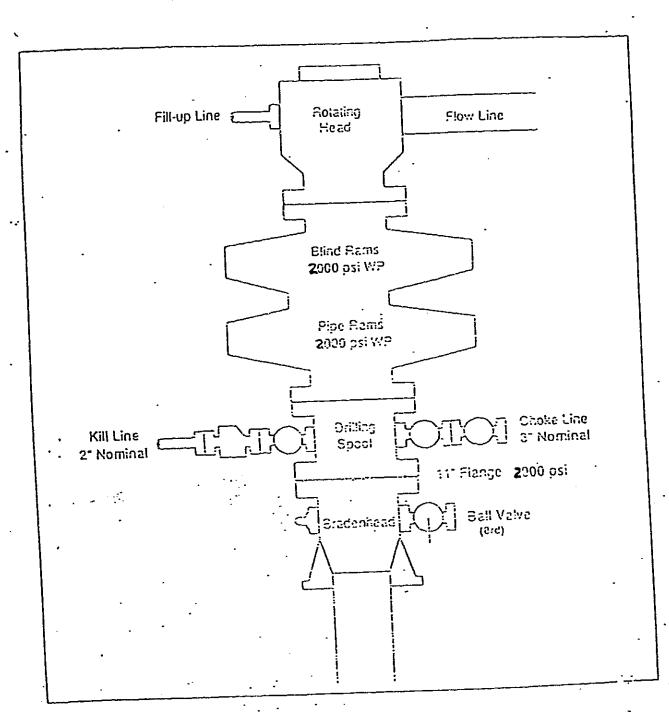
2 Ħ \* ā£" **~** = ROAD kidggway 7 4 6040 care #2-1 \* = ı, OF EED WEDL Ē

\*

\_\_\_\_

. SCHARE

BOP STACK ARRANGEMENT



All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 600 psi. The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

O

RECEIPT Date 10-14 1995 No. 3082

Received From May Way Way Our Carp

Address 1080-100 45 4405 W

Received From Markhay As Dil Org.

Address 1080-700, 45 April 1965 April 1965

, 8K809 Begitbum

or with

	1155
RIDGEWAY ARIZONA OIL CORP.  403-266-6362 1080-700 - 4TH AVENUE S.W. CALGARY, ALBERTA CANADA T2P 3J4  October 5th 19	91-2/1221 95
PAY TO THE Arizona Geological Surveys \$	25.00
Twenty-five	00 DOLLARS
BANK ONE.  Bank One, Arizona, NA St. Johns Office (043) St. Johns, Arizona	307
FOR Well Licence Sec 2-11N-29E  11 00115511 1122  Permit # 293	

Ω

7

Operator Ridgeway Arizona Oil Corporation

Bond Company: Bank One Arizona Amount: \$25,000\*

CD#4002111 (\$10,000) 07/07/94

Bond No.: <u>CD#4002111 (\$10,000)</u> Date approved: <u>11/28/94</u>

\* Two separate CD's to make up one blanket bond. These 2 CD's are not to be released until all wells covered by the blanket bond have been plugged and abandoned.

### Permits covered by this bond:



Fife Symington

### Arizona Geological Survey

416 W. Congress, Suite 100 Tucson, Arizona 85701 (520) 770-3500

July 28, 1997



Larry D. Fellows Director and State Geologist

Mr. Don Riggs Vice President Ridgeway Arizona Oil Corp P.O. Box 1110 St. Johns, Arizona 85936

Dear Mr. Riggs:

In response to your phone call about expired permits 890, 891, 892, and 893, please be advised that extensions may be considered after we receive your request certifying in writing that the wells will be drilled in accordance with the drilling prognosis and all conditions and notification requirements of the original permits.

Our records show that Ridgeway Arizona Oil Corporation remains out of compliance with Commission rules in several areas. Ridgeway is not in compliance with its obligation to: (1) plug the 22-1 State (885) and Plateau Cattle 1A (883) wells; (2) post identifying signs at each well; (3) file samples on the 22-1X (888) and 11-21 (895) wells; (4) file logs, tests, core chips, and analyses; (5) report the stimulation of any well within 15 days of the stimulation; and (6) submit sundry reports detailing operations from spud date to current status for each of the 11 wells drilled by Ridgeway in 1997.

Sincerely,

Steven L. Rauzi

Oil & Gas Program Administrator

Spevent Pain

Oil and Gas Commissioners; Larry D. Fellows
Office of Attorney General

O





Fife Symington Governor

## Arizona Geological Survey

416 W. Congress, Suite 100 Tucson, Arizona 85701 (520) 770-3500



Larry D. Fellows Director and State Geologist

June 2, 1997

Mr. Don Riggs Vice President Ridgeway Arizona Oil Corp P.O. Box 1110 St. Johns, Arizona 85936

Re: Expiration of Drilling Permits:

Ridgeway 35-1 State, Permit 890 Ridgeway 10-1 State, Permit 891 Ridgeway 11-1 State, Permit 892 Ridgeway 02-1 State, Permit 893

Dear Mr. Riggs:

Our records show that the referenced permits expired in April 1997. These permits are now null and void unless an extension in writing is granted by the Oil and Gas Conservation Commission.

Sincerely,

Steven L. Rauzi

Oil & Gas Program Administrator

Stevent Raiz

The Apache County Observer - Apache County, AZ - Thursday, May 15, 1997

# Ridgeway expands drilling to 12 wells



Photo by Art Harringto

Ridgeway Petroleum president Walter B. Ruck, (rt.) has announced the company will drill 12, instead of 10, delineation wells. Don Riggs, manager of Ridgeway Arizona, is also pictured.

ST. JOHNS — Walter B. Ruck, president of Ridgeway Petroleum, announced Thursday in St. Johns that the Calgary-based company's 10-well delineation drilling program has been expanded to 12 wells. The company's president and chairman of the board was in Arizona to meet with staff and to personally check on the progress being made in defining the company's highly-successful CO2 discovery in southern Apache County.

"Every CO2 field has been discovered by accident," he said. "We initially came here searching for oil." The tip-off for Ridgeway had been the published results of the geothermal drilling done several years ago at Alpine, which had been funded by the United States Department of Energy. While Ruck still believes oil may be found in the area, the company's initial drilling discovered a vast reservoir of carbon dioxide gas instead. Ruck explained that it seems to be found where there has been contact between volcanic deposits and wet limestone. "The fields are typically very large when you find them," he said. "But you may drill hundreds of wells searching for the gas and never find it." So far the gas has been found in every well Ridgeway has drilled here.

California petroleum and food industries all need CO2 badly, Ruck explained, since no natural reservoirs of it have ever been discovered there. The demand is such that there appears to be substantial interest in constructing a pipeline which would likely carry the liquefied and pressurized gas from southern Apache County to Bakersfield, Cal. Ruck estimates it would cost between \$200-250 million to

between \$200-250 million to build such a pipeline.

The Arizona Oil and Gas Commission has decided to hold its annual meeting on June 13 in St. Johns at Ridgeway's offices. According to Ruck, the meeting is kind of snowballing. At least four pipeline companies have notified him they plan to come,

along with representatives of a number of major oil companies. Ruck expects some important decisions about the future of Ridgeway's project may be made at that time.

Ruck cautioned, "We're not a panacea for the area." He noted that the local unemployment rate will not be reduced much by the CO2 development, since most of the work is so specialized it requires bringing in highly-trained and experienced personnel. On the other hand, he admitted, he believes the development will ultimately be good for the area. It is already infusing money into the local economy. The company now has a large drilling rig and a service rig, or completion unit, in addition to all of the other well services which have come in to assist in the exploration. "It is also an environmentally clean industry, when compared to other

oil and gas exploration," he said.

What about the helium content? According to Ruck, it has been significant, testing between .65 and .70 percent. By comparison, he said, most of the helium being commercially extracted tests at less that .30 percent. Consequently, the construction of a helium extraction plant is still a possibility, he said, "But it would be expensive—probably \$35-40 million." Interestingly enough, the United States produces 95 percent of the world's helium.

The president said the company will be going to faster air drilling for the remainder of the planned wells. He said the down side is that it is impossible to core or to get the quality of samples which can be obtained by mud drilling. "We did enough coring and drill-stem testing on the first wells, though, that we can stand the air drilling on the remaining wells," he said.

The wells drilled thus far have ranged from 1,800 to 3,150 feet. "As we go further north," Ruck said, "the wells may go down to 4,500." The required depth can vary as much as 450 feet, due to surface elevation differences. All of the wells are now being taken down to the granite.

O

31-81-84-88 10-81-84-88

## Stock soars on drilling discoveries

Art Harrington file 893

APACHE COUNTY Southern Apache County is making international news with the discovery of its vast CO2 resources. Consequently the stock of developer Ridgeway Petroleum Corporation continues to climb.

Drilling by Aztec Well Service, contracted by Ridgeway, began on February 12 to prove up the carbon dioxide gas reserves which had been estimated at fourto-five trillion cubic feet. The huge rigs have lost no time in completing seven wells and are now working on the eighth.

According to information The Observer has been able to discover, the company has hit CO2 in each of the wells drilled. This would seemingly indicate widespread deposits, since drilling thus far has been reported in areas from north of St. Johns to just northeast of Springerville.

The discovery has not escaped the attention of the stock market. Ridgeway Petroleum stock (symbol RGW) has moved this year from a low of \$.92 per share to a high of \$7.35 (Canadian). On Friday it closed at \$5.55, having traded as high as \$5.75 that day.

On Monday trading of the stock on the Vancouver exchange was temporarily halted. It was resumed after the company announced a blowout on the #6 well had been contained. With that being an indicator of an even greater reservoir, the stock closed on Monday at \$6.00.

Ridgeway was incorporated February 22, 1980 as Brent West Minerals. It continued doing business under that name until February 26, 1990, when it became Ridgeway Petroleum Corp. Its

Photo by Grant Harrington

Drilling in southern Apache County has revealed immense deposits of CO2. Ridgeway Petroleum, the developer, has realized spectacular increases in its stock since the news of the discoveries has reached investors. The rig pictured above costs over \$1 million dollars. It has a crew of eight which man it with 12-hour shifts, so the rig can keep drilling 24-hours a day.

home office is in Calgary, Alberta, dustries. Canada. The primary business of the company is the extraction of oil and gas, with a secondary interest in diamonds. As of May 2, 11,061,829 of its authorized 25,000,000 shares had been issued. The volume traded on that day was 12,700.

Ridgeway President Walter Ruck also announced on May 2 that a 4,800,000 special warrant brokered private placement through Yorkton Securities had closed. Gross proceeds of \$16,800,000 were received, of which approximately \$10 million was being held in escrow, pending the advancement of the company's previously announced transaction involving Arizona Resources In-

Is there a market for such CO2 resources? Without a doubt. The largest consumer of CO2 is the petroleum industry, which uses the gas to help force otherwise unretrievable oil deposits into collectable pools. The Permian Basin in west Texas and eastern New Mexico, for example, uses in excess of 1.4 billion cubic feet per day in its oil recovery operations. The hundreds of other uses for CO2 include a diversity ranging from food processing, carbonation of beverages and water purification, to flash freezing.

How would the product be moved? According to information The Observer has been able to glean, resources of two trillion cubic feet would justify the construc-

tion of a pipeline to oilfields in California or Texas. The company has apparently proven with is wells drilled thus far that more than adequate reserves exist to begin planning for a pipeline.

Our information also indicates that a number of major players in the industry are actively involved in bidding on the gas. Names such as Chevron and Cal Resources continue to surface.

Also previously reported has been the discovery of helium, along with the CO2. While the quantity of helium has yet to be determined, The understands Observer Ridgeway is also evaluating the possibility of building a helium extraction plant in southern Apache County.





Fife Symington Governor

### State of Arizona Arizona Geological Survey

416 W. Congress, Suite 100 Tucson, Arizona 85701 (520) 770-3500



Larry D. Fellows Director and State Geologist

October 18, 1996

Mr. Walter B. Ruck, President Ridgeway Arizona Oil Corporation 1080, 700-4th Avenue S.W. Calgary, Alberta T2P 3J4

Reinstate State Drilling Permits Re:

Ridgeway 35-1 State, Permit 890 Ridgeway 10-1 State, Permit 891 Ridgeway 11-1 State, Permit 892 Ridgeway 02-1 State, Permit 893

Dear Mr. Ruck:

Receipt No. 3091 for the \$100 reinstatement fee for the referenced permits is enclosed. Remember to notify this office at least 48 hours before commencing drilling operations at any of the referenced wells.

Sincerely,

Steven L. Rauzi

Oil & Gas Program Administrator

Stewal. K

Enclosure

Among amil

RIDGEWAY ARIZONA OIL CORP.

1080, 700 - 4th Avenue S.W., Calgary, Alberta T2P 3J4 Phone (403) 266-6362 Fax (403) 262-5294

October 9, 1996

Arizona Geological Survey 416 W.Congress, Suite 100 TUCSON, Arizona 85701

ATTN: Mr. Steven L. Rauzi,
Oil & Gas Administrator

Dear Sir.

RE: State Drilling Permits - Ridgeway 35-1 State, Permit 890
Ridgeway 10-1 State, Permit 891
Ridgeway 11-1 State, Permit 892
Ridgeway 02-1 State, Permit 893

Please find enclosed 4 cheques in the amount of \$25.00 each for a new application fee for each of the above named permits to be reinstated. We also certify that the wells will be drilled in accordance with the drilling prognoses submitted with the original applications.

We will be complying with the State Rules re 22-1 State and Plateau Cattle 1A (Permit 883) in the very near future.

Yours sincerely,

RIDGEWAY ARIZONA OIL CORP.

Walter B. Ruck, Chairman

encl.

/m

(

RECEIPT Date 10-18 1996 No. 3091

Received From Ridgeinas Atizona Oil Cotpo.

Address/080-700 4th AVES.W. Calgary Alberta

Ohe hundred and Dollars \$100.00

For Reinstate pehmit #5 890, 891, 892, 4893

Chock #5 DIS 1011, DID ~ 1018 For Reinstate Pehmit #5

Check #5 215, 126, 12

ACCOUNT HOW PAID

AMT. OF CASH

CASH AMI, PAID BALANCE DUE CHECK MONEY

C

BK806 Radiform

-7:21.252H



Fife Symington Governor

## Arizona Geological Survey

416 W. Congress, Suite 100 Tucson, Arizona 85701 (520) 770-3500



Larry D. Fellows Director and State Geologist

file 893

September 26, 1996

Mr. Walter B. Ruck, President Ridgeway Arizona Oil Corporation 1080, 700-4th Avenue S.W. Calgary, Alberta T2P 3J4

Re:

**Expiration of State Drilling Permits** 

Ridgeway 35-1 State, Permit 890 Ridgeway 10-1 State, Permit 891 Ridgeway 11-1 State, Permit 892 Ridgeway 02-1 State, Permit 893

Dear Mr. Ruck:

The referenced drilling permits, issued October 17, 1995, will expire on October 17, 1996. State drilling permits are valid for 180 days from the date of issue and may be extended for an additional 180 days. Since these permits have now been extended for one year from the date of issue, it will be necessary for you to reinstate the permits if you plan to commence drilling after October 17, 1996.

You may reinstate the drilling permits by (1) submitting a new \$25.00 application fee for each permit to be reinstated, and (2) certify in writing that the wells will be drilled in accordance with the drilling prognoses submitted with the original applications. All conditions and notification requirements of the Permits remain in force.

Our records show that two of your wells are not in compliance with State Rules. What are your plans for plugging the 22-1 State (Permit 885) and cementing the annulus of the Plateau Cattle 1A (Permit 883). I understand this could be accomplished by dispatching a cement truck from St. Johns.

Sincerely,

Steven L. Rauzi

Oil & Gas Program Administrator

Staul Range







Fife Symington Governor

## State of Arizona Arizona Geological Survey

416 W. Congress, Suite 100 Tucson, Arizona 85701 (520) 770-3500



Larry D. Fellows Director and State Geologist

February 15, 1996

Mr. Alan P. Emmendorfer, Agent Ridgeway Arizona Oil Corporation 5107 Budding Lane Farmington, New Mexico 87402 file 893

Dear Mr. Emmendorfer:

This letter will serve as approval of your written request for a six-month extension to State Permits 888, 890, 891, 892, and 893. The new expiration dates will be August 25, 1996, for Permit 888 and October 17, 1996, for Permits 890, 891, 892, and 893.

Outstanding concerns on Ridgeway Arizona Oil Corporation's operations near St. Johns include

- 1. Plugging State 22-1 (Permit 885) from 218 feet to surface with cement;
- 2. Cementing open annulus on Plateau Cattle 1A (Permit 883);
- 3. Filing of washed and dried samples for State 3-1 (Permit 884);
- 3. Filing of Mud, SDL/DSN, and LSA logs on State 3-1 (Permit 884); and
- 4. Filing of Test Report and Gas Analysis on State 3-1 (Permit 884).

Washed and dried samples, and copies of all test reports, gas analyses, and all logs run are required pursuant to A.A.C. R12-7-121, a copy of vinich is enclosed for your information and file.

Please advise if I may be of further assistance.

Sincerely,

Steven L. Rauzi ,

Oil & Gas Program Administrator

Steven L. Kning

Enclosure

c Walter B. Ruck

۵

Alan P. Emmendorfer 5107 Budding Ln Farmington, NM 87402 (505) 327-1376

Feb. 13, 1996

GENERALES

Mr. Steven L. Rauzi Oil and Gas Program Administrator Arizona Geological Survey 416 W. Congress, Suite 100 Tucson, AZ 85701 file 893

Dear Mr. Rauzi:

Ridgeway Arizona Oil Corporation requests an extension of the permit to drill for the following wells located in Apache County, Arizona.

Permit Number	
891	
892	
890	
893	
888	

Thank you for your prompt attention to this matter. Should you have any questions concerning the extension please do not hesitate to contact me.

Sincerely,

Alan P. Emmendorfer

Agent

Ridgeway Arizona Oil Corporation



0

01/24/96

11:27

\$2 5294

RIDGEWAY PETRO ( )

Ø 001/001



### RIDGEWAY PETROLEUM CORP.

1080, 700 - 4th AVENUE S.W., CALGARY, ALBERTA T2P 3J4 TELEPHONE: (403) 266-6362 FAX: (403) 262-5294

STEUS-RACET F.Y.I

file 893

NEWS RELEASE

Symbol: RGW Listed: VSE January 23, 1996

### "ARIZONA PROJECT"

"Land position increased to cover potential 6.4 trillion cubic feet of CO2/Helium gas reserve"

Ridgeway Petroleum Corp. (RGW) has been advised by Arizona Resources Industries, Inc. (ARI) (the owner and operator of the project) that as a result of new geological information, interpretation and consultation with the Arizona Geological Survey, leases have been obtained on an additional 144,000 acres bringing the total under lease to 186,000 acres.

The current leasing program is to acquire up to a total of 250,000 acres and should be completed within 15 days.

RGW controls in excess of 50% of ARI by share ownership and Guaranteed Convertible Notes.

ON BEHALF OF THE BOARD

Walter B. Ruck, Chairman

THE VANCOUVER STOCK EXCHANGE HAS NEITHER APPROVED NOR DISAPPROVED THE INFORMATION CONTAINED HEREIN.



State Land Bepartment

1616 WEST ADAMS PHOENIX, ARIZONA 85007



M.J. HASSELL STATE LAND COMMISSIONER

January 2, 1996

Ms. Carol Griffith
State Historic Preservation Office
1300 West Washington
Phoenix, Arizona 85007

RE: Ridgeway Petroleum (ASLD 13-53801, 13-53955)

Dear Ms. Griffith:

In February 1994, the Arizona State Land Department (ASLD) issued an oil and gas lease (13-53801) on 2845 acres of State Trust land in Sections 2, 3, 4, 10, 11, and 12 in T11N R29E, and two months later, ASLD issued another oil and gas lease (13-53955) for Section 35, T12N R29E). Both leases are held by Ridgeway Arizona Oil Corporation of Alberta Canada (Ridgeway).

Before drilling four exploratory gas wells within the lease area, ASLD asked Ridgeway to provide an archaeological survey of the four proposed well locations (M&B NW 4 SE 4 NW 4 Sec. 2, NE 4 SW 4 NE 4 Sec. 10, NW 4 SE 4 NW 4 Sec. 11, T11N R29E, and in SW 4 NE 4 SW 4 Sec. 35, T12N R29E) and proposed access roads through Sections 2, 10, and 11 in T11N R29E, and through Section 35 in T12N R29E. The results of the archaeological survey are described in Access Roads, Ridgeway Arizona Oil Corporation, Apache County, Arizona that was prepared by Complete Archaeological Service Associates (CASA) in October 1995.

The report (copy enclosed) indicates that only two isolated artifacts were found during the survey, which covered 30.1 acres including the drill locations an proposed access roads. Therefore, no additional archaeological work was needed before Ridgeway drilled the wells as permitted by the Arizona Oil and Gas Conservation Commission (AOGCC).

Two typographic errors in the report pertaining to the project area location in Section 35 have been identified by Ms. Beth Grindell of the Arizona State Museum (ASM), and I have corrected these on the enclosed copy (see pages 2 and 4). By copy of this letter to the author, Mr. Laurens C. Hammack, I would like to take this opportunity to ask that future reports of surveys of State Trust land specifically identify ASLD as the affected land-managing agency, since many different state agencies administer "State lands".

file 893

E.

O



0.2.5223

1.225

€,₹

### Arizona State Land Bepartment

1616 WEST ADAMS PHOENIX, ARIZONA 85007



M.J. HASSELL STATE LAND COMMISSIONER

January 2, 1996

file 893

Ms. Carol Griffith State Historic Preservation Office 1300 West Washington Phoenix, Arizona 85007

RE: Ridgeway Petroleum (ASLD 13-53801, 13-53955)

Dear Ms. Griffith:

In February 1994, the Arizona State Land Department (ASLD) issued an oil and gas lease (13-53801) on 2845 acres of State Trust land in Sections 2, 3, 4, 10, 11, and 12 in T11N R29E, and two months later, ASLD issued another oil and gas lease (13-53955) for Section 35, T12N R29E). Both leases are held by Ridgeway Arizona Oil Corporation of Alberta Canada (Ridgeway).

Before drilling four exploratory gas wells within the lease area, ASLD asked Ridgeway to provide an archaeological survey of the four proposed well locations (M&B NW¼SE¼NW¼ Sec. 2, NE¼SW¼NE¼ Sec. 10, NW¼SE¼NW¼ Sec. 11, T11N R29E, and in SW¼NE¼SW¼ Sec. 35, T12N R29E) and proposed access roads through Sections 2, 10, and 11 in T11N R29E, and through Section 35 in T12N R29E. The results of the archaeological survey are described in Cultural Resource Inventory - Ridgeway State 2-1) 10-1, 11-1, and 35-1 Well Locations and Access Roads, Ridgeway Arizona Oil Corporation, Apache County, Arizona that was prepared by Complete Archaeological Service Associates (CASA) in October 1995.

The report (copy enclosed) indicates that only two isolated artifacts were found during the survey, which covered 30.1 acres including the drill locations an proposed access roads. Therefore, no additional archaeological work was needed before Ridgeway drilled the wells as permitted by the Arizona Oil and Gas Conservation Commission (AOGCC).

Two typographic errors in the report pertaining to the project area location in Section 35 have been identified by Ms. Beth Grindell of the Arizona State Museum (ASM), and I have corrected these on the enclosed copy (see pages 2 and 4). By copy of this letter to the author, Mr. Laurens C. Hammack, I would like to take this opportunity to ask that future reports of surveys of State Trust land specifically identify ASLD as the affected land-managing agency, since many different state agencies administer "State lands".

o

Ms. Carol Griffith January 2, 1996 Page 2

Please call me at 542-2684 if you have any questions regarding this matter.

Sincerely,

Kenneth Rozen

Cultural Resources Manager

KR/ch

encl.

\*\*

C: Alan Emmendorfer, Ridgeway
Beth Grindell, ASM
Laurens Hammack, CASA
Barry Moody, ASLD Minerals
Steve Rauzi, AOGCC

Ridgeway Arizona Oll Corporation 1080 700 4th Avenue SW Lalgary Alberta T2P 3J4

Ridgeway # 35-1 State
7/W 893

**ABSTRACT** 

A cultural resource inventory was undertaken on four proposed CO2 well locations and associated access roads on State of Arizona lands southeast of St. Johns, Arizona. The inventory was done by Laurens C. Hammack, Complete Archaeological Service Associates (CASA) at the request of Alan Emmendorfer, agent for the operator, Ridgeway Arizona Oil Corporation. The field work was done on October 17, 1995 under the auspices of State of Arizona Permit No. 95-111 issued to CASA.

A 300-ft by 300-ft area (2.06 acres) was inventoried for each well pad with maximum dimensions of 250-ft by 180-ft (1.03 acres). Approximately 9500 feet of access road was also inventoried with a 100-ft wide corridor (21.85 acres) surveyed for a maximum 30-ft wide construction easement (6.55 acres). A total of 30.09 acres was inventoried for this project. No sites were recorded within the survey areas and cultural resource clearance is recommended for Ridgeway State 2-1, 10-1, 11-,1 and 35-1 well locations and access roads at the locations described in this report.

#### INTRODUCTION

A Class III cultural resource inventory was undertaken on four proposed CO<sub>2</sub> well locations and associated access roads on State lands approximately 12 miles southeast of St. Johns, Arizona (Figure 1). The inventory was undertaken for Ridgeway Arizona Oil Corporation of Alberta, Canada at the request of Alan Emmendorfer, agent for the operator. The inventory was done by Laurens C. Hammack, Complete Archaeological Service Associates (CASA) on October 17, 1995. The field work was done under the authority of Arizona State Permit No. 95-111 issued to CASA and was undertaken to comply with various cultural resource preservation legislation.

### PROJECT LOCATION AND DESCRIPTION

The proposed well locations are situated in rolling grasslands with areas of pinyon/juniper woodlands in Sections 2, 10, and 11 in T11N, R29E and Section (32) T12N, R29E, Gila-Salt River PM, Apache County, Arizona (Figure 2). All locations and access roads area on leased State lands (State Lease No's 13-53-801 and 13-53-955) and are utilized for cattle grazing. At elevations ranging from 6650 to 6850 feet vegetation includes snakeweed, rabbitbrush, narrow-leaf yucca in addition to the pinyon, juniper, and grasses. Most of the locations contain outcrops of Richville gravels, a localized geological deposit. A complete description of each location including details on cadastral location, staked footages, setting, cultural resources, and recommendations is presented in the following section. The map references for this project are the Lyman Lake, Voight Ranch, Mesa Parada NW, and St. Johns South, Arizona 7.5 minute USGS quadrangles dated 1971/1984.

### SURVEY METHODOLOGY AND PREVIOUS RESEARCH

Prior to beginning the field investigations, a record search was undertaken at the Arizona State Museum in Tucson. This record search indicated that no sites had been found or surveys previously undertaken within any of the sections in the project area. Background data on the prehistory of the area can be found in several large scale projects undertaken within the general vicinity of St. Johns. Between 1974 and 1978, the Museum of Northern Arizona conducted surveys and excavations on the proposed Coronado Generating Station and associated rail lines and transmission lines (Bradford ND; Stebbins 1980; Gasser 1982; Swarthout and Dulaney 1982). At the same time, the Arizona State Museum was conducting excavations on the Tucson Electric Power Company's Generating Station between St. Johns and Springerville (Westfall 1981). Included in this project was excavation along the proposed coal railroad connecting the Coronado Generating Station and the TEP Generating Station. This railroad passes several miles to the east of the present project. Of the five sites recorded southeast of St. Johns, four are historic trash scatters all post dating 1950 and were of no significance. The one prehistoric site is a lithic scatter with a probable hearth. The site was not considered significant and was not excavated. This report also provides good background information on the natural environment of the project area with excellent descriptions of the geology, soils, and vegetation.

The four well locations had been completely staked by Poteet Engineering, Farmington New Mexico prior to conducting the inventory. Each drill hole had been staked with a 5 foot metal fence post with a lathe attached giving well name and staked footages. The well pad and pit corners were also staked with labeled lathe attached. The center stake was marked with a variety of flagging colors with corner stakes marked with pink flagging. A 300-ft by 300-ft (2.06 acre) area was surveyed for each well pad measuring a maximum 250 by 180 feet (1.03 acres) (Figure 3). Alan Emmendorfer, agent for the operator accompanied the archaeologist

C'I-BOLA C A T RON Plate 12
Lever Sue
Francisco Plate

GILA

Figure 1. Project location map, eastern Arizona.

MESA PARADA NW, ARIZ. 34109-D2-TF-024 ST. JOHNS SOUTH, ARIZ. 34109-D3-TF-024 ARIZONA = 1971 PHOTOREVISED 1984 1971 PHOTOREVISED 1984 QUADRANGLE LOCATION VOIGT RANCH, ARIZ. 34109-C2-TF-024 LYMAN LAKE, ARIZ. 34109-C3-TF-024 1971 PHOTOREVISED 1984 1971 PHOTOREVISED 1984 SCALE 1:24 000 I MILE -6000 7000 FEET 4000 5000 1000 1000 3000 I KILOMETER CONTOUR INTERVAL 20 FEET DATUM IS MEAN SEA LEVEL

Figure 2. Location map for Ridgeway State 2-1, 10-1, 11-1, and 12-1 well pads and access

4

RIDGEWAY AREZONA OIL CORPORA ON

SCALE: HORZ. 1" = 50' VERT. 1" = 10' RIDGEWAY STATE 11-1 1775 F/NL & 1660 F/WL SEC. 11 T11N R29E G & S. R.M. APACHE COUNTY, AZ.

CONTOUR INT. = 1'

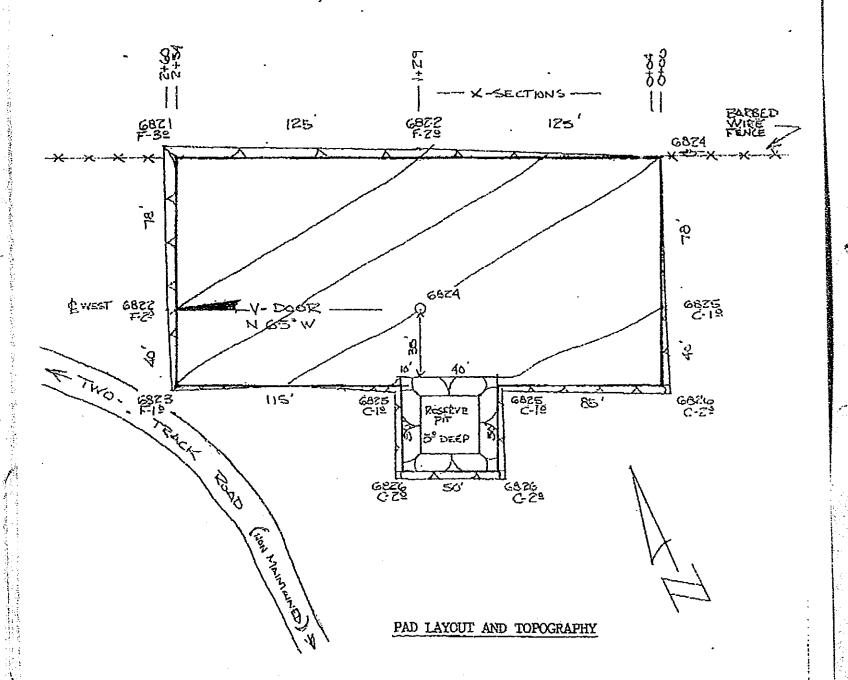


Figure 3. Typical plat for Ridgeway Arizona Oil Corporation  ${\rm CO_2}$  wells.

during the inventory. The survey was done by one person walking a series of parallel transects spaced no greater than 15 meters apart. Access roads were inventoried by walking a tight zig zag transect across the flagged centerline. A 100-ft wide corridor was inventoried for a maximum 30-ft wide construction easement.

#### INVENTORY RESULTS AND RECOMMENDATIONS

The cultural resource inventory of 30.09 acres for four proposed CO<sub>2</sub> well locations and associated access roads resulted in the location of no sites. Two chalcedony flakes were noted in the surveyed bufferzone of one well. These flakes have no research potential. Cultural resource clearance is recommended for R.dgeway State 2-1; Ridgeway State 10-1; Ridgeway State 11-1, and Ridgeway State 35-1 and associated access roads at the locations described in this report.

#### REFERENCES

Bradford, James E.

ND The Coronado Generating Station Plant Site and Access Road. The Coronado Project Archaeological Investigations. Coronado Series 1.MNA Research Paper 17, Flagstaff.

Gasser, Robert E.

1982 The Specialists Volume: Biocultural Analyses. The Coronado Project Archaeological Investigations. Coronado Series 4. MNA Research Paper 23, Flagstaff.

Stebbins, Sara

1980 The Concho Well Field Water Transmission Pipeline. The Coronado Project Archaeological Investigations. Coronado Series 2. MNA Research Paper 19, Flagstaff.

Swarthout, Jeanne and Alan Dulaney

1982 A Description of Ceramic Collections from the Railroad and Transmission Line Corridors. The Coronado Project Archaeological Investigations. Coronado Series 5. MNA Research Paper 26, Flagstaff.

Westfall, Deborah A.

Prehistory of the St. Johns Area, East-Central Arizona: The TEP Project.

<u>Cultural Resource Management Division. Arizona State Museum. The University of Arizona Archaeological Series No. 153, Tucson.</u>

**WELL DESCRIPTIONS** 

Well Name:

Ridgeway State 2-1

Location:

NW SE NW Section 2, Well pad:

Access road: [end] NW NW SE Section 2(T29N, R11E, G&SR PM, Apache

County, Arizona(Figure 2)

Operator:

Ridgeway Arizona Oil Corporation

Map Reference:

Mesa Paradanw NW, Ariz. 7.5 minute 1971/1984

Staked Footages:

1660' FNL, 1660' FWL

Ownership:

State of Arizona

Elevation:

6710 feet

Area Surveyed:

Well pad:

300-ft by 300-ft (2.06 acres) surveyed for a well pad with dimensions of 250-ft by 180 feet (1.03 acres) (Figure 3).

Access rd.:

Approximately 2000 ft in-length, 100-ft wide corridor (4.6 acres) surveyed for maximum 30-ft wide (1.38 acres).

TIIN RZ9E

Description:

Well pad is situated on north sloping terrain above small drainage in heavy pinyon/juniper woodland (Figure 4). Several erosional channels cut through pad area. Gravels occur in a sandy gray brown loam. Besides the pinyon/juniper several narrow-leaf yucca and grasses occur. Access road out of northeast corner of pad over rolling grassland terrain (chained pinyon-juniper) with snakeweed, sand sage, and rabbitbrush occurring throughout. Road ties-in with new road from Ridgeway State 35-1.

Cultural Resources: None

Recommendations: Cultural resource clearance is recommended for Ridgeway State 2-1 and

access road at the location described above.

Well Name:

Ridgeway State 10-1

Location:

Well pad: NE SW NE Section 10,

Access road:

[END] NW SE NE Section 10, T11N, R29E, G&SR PM,

Apache County, Arizona (Figure 2).

Operator:

Ridgeway Arizona Oil Corporation

Map Reference:

Lyman Lake, Ariz. 7.5 minute, 1971/1984

Staked Footages:

1660' FNL, 1660' FEL

Ownership:

State of Arizona

Elevation:

6654 feet

Area Surveyed:

Well pad:

300-ft by 300-ft (2.06 acres) surveyed for a well pad with dimensions of 250-ft by 180 feet (1.03 acres) (Figure 3). Approximately 500-ft in-length, 100-ft wide corridor (1.15

Access rd.:

acres) surveyed for maximum 30-ft wide (0.345 acres)

easement

Description:

Well pad is staked on level to gently west/northwest sloping on cinder covered soil with heavy concentrations of dark-colored gravels. Location directly above (east/southeast) of small drainage. Prominent mesa across wash to west (Figure 5). Vegetation of grasses, snakeweed, and scattered small juniper. Access road off existing ranch road to existing water tank to south.

Cultural Resources:

None

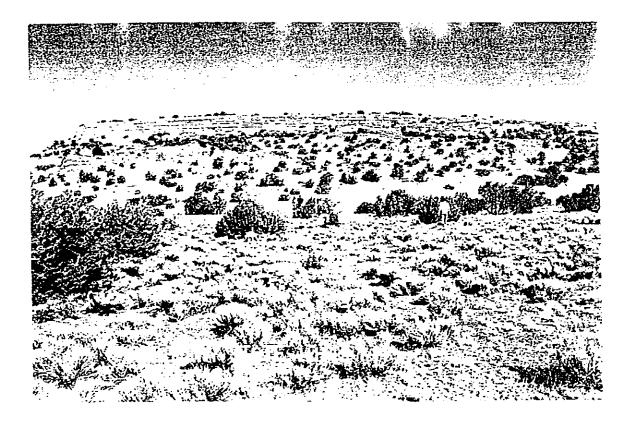
Recommendations:

Cultural resource clearance is recommended for Ridgeway State 10-1 and

access road at the location described above.



Figure 4. Staked location for Ridge a State 2-1 looking orthwest. Arrow indicates drill hole.



are 5. Overall view of staked locar on for Ridgeway State 10-1 boking west.

Well Name:

Ridgeway State 11-1

Location:

Well pad: NW SE NW Section 10, T11N, R29E, G&SR PM, Apache County,

Arizona (Figure 2).

Operator:

Ridgeway Arizona Oil Corporation

Map Reference:

Voight Ranch, Ariz. 7.5 minute, 1971/1984

Staked Footages:

1775 FNL, 1660' FWL

Ownership:

State of Arizona

Elevation:

6824 feet

Area Surveyed:

Well pad:

300-ft by 300-ft (2.06 acres) surveyed for a well pad with dimensions of 250-ft by 180 feet (1.03 acres) (Figure 3). Existing, not surveyed.

Access rd.:

Description:

Well pad is staked in rolling grasslands just east of rim of small canyon. Almost exclusively grasses with some snakeweed growing on loamy soil covered with nodules of travertine. Pinyon/juniper grow along edge of canyon but not within well pad (Figure 6). Location bordered to north by

fenceline with road to south and west.

Cultural Resources:

None

Recommendations:

Cultural resource clearance is recommended for Ridgeway State 11-1 and

existing access road at the location described above.

Well Name:

Ridgeway State 35-1

Location:

Well pad:

SW NE SW Section 35, T12N, R29E

Access road:

[end] NE NW NE Section 11, T11N, R29E, G&SR PM,

Apache County, Arizona (Figure 2).

Operator:

Ridgeway Arizona Oil Corporation

Map Reference:

Mesa Paradanw NW, Ariz. 7. 5 minute 1971/1984

Staked Footages:

1660' FSL, 1660' FWL

Ownership: Elevation:

State of Arizona

Area Surveyed:

6689 feet

Well pad:

300-ft by 300-ft (2.06 acres) surveyed for a well pad with dimensions of 250-ft by 180 feet (1.03 acres) (Figure 3).

Access rd.:

Approximately 7000-ft in-length, 100-ft wide corridor (16.1 acres) surveyed for maximum 30-ft wide (4.83 acres)

easement

Description:

Well pad staked on level to gently northwest-sloping terrain in open pinyon/juniper woodland (Figure 7). Mostly grasses with some snakeweed. Several small ephemeral drainages on south side of pad. Scattered gravels throughout. Access road out of east side of pad and follows level ridge line to south over scattered pinyon/juniper covered terrain into open grasslands to tie-in with existing ranch road in Section

11.

None **Cultural Resources:** 

Recommendations: Cultural resource clearance is recommended for Ridgeway State and access road at the location described above.

Figure 6. Staked location for Ridgeway State 11-1 looking west.



Figure 7. Staked location for Ridgeway State 35-1, looking west.

**Rocky Mountain Region Report** Section I

The many

10-23-95

Page 2

### Aneth Field Horizontal Well Producing from Four Laterals

₹ EXACO EXPLORATION & Production Inchas completed a horizontal redrill in southeastern Utah's Aneth field 16 miles east of Bluff producing from four open-hole laterals in Desert Creek.

The F-114 Aneth Unit, nenw 14-40s-24e, southeastern San Juan County, was completed on pump producing 340 bbls of 42° oil with 192,000 cuft of gas and 892 bbls of water per day. Two laterals were drilled northwestward to bottomhole locations in nw nw of the section. The upper Desert Creek leg is producing from 5604-6597 ft, at a true vertical depth of 5698 ft. Production from the lower lateral is from 5649 to 6660 ft. True vertical depth of the latter borehole is 5767 ft.

The other two horizontal legs were drilled in southeasterly directions to bottom-hole locations in sw ne 14-40s-24e. The upper Desert Creek lateral is producing from 5594-7342 ft (true vertical depth: 5686 ft); the lower lateral is producing from 5790-7009 ft (true vertical depth: 5747 ft).

Superior Oil Co originally completed the well (as the A-8 Navajo) in 1957 producing from Desert Creek at 5678-5811 ft. In 1969, Texaco recompleted the well as an Ismay producer at 5596-5606 ft. Texaco in

1983 worked the well over again, perforating two lower Desert Creek intervals at 5773-90 and 5793-5800 ft.

Log tops, measured from a kelly bushing elevation of 4872 ft, include Ismay at 5526 frand Desert Creek at 5675 ft.

file 893

### Ridgeway Schedules Delineation Work Near Arizona CO<sub>2</sub> Discovery

DIDGEWAY ARIZONA Oil Co has scheduled four stepouts from a carbon dioxide Kdiscovery completed by the company earlier this year about 10 miles southeast of St. Johns in eastern Arizona.

The eastern Apache County ventures are designed to evaluate the Fort Apache limestone member of the Permo-Pennsylvanian Supai (Yeso/Abo equivalent) and are projected to depths ranging from 2465 to 2680 ft. They are:

2-1 Ridgeway-State, se nw 2-11n-29e;

10-1 Ridgeway-State, sw ne 10-11n-29e;

☐ 11-1 Ridgeway-State, se nw 11-11n-29e; 35-1 Ridgeway-State, ne sw 35-12n-29e.

The new locations all are within a mile of an undesignated discovery completed by Ridgeway last month on the crest of the St. Johns Anticline at the 3-I State 13-53-801, ne se 3-11n-29e. That well flowed 663,000 cu ft of gas per day on a 32/64-inch choke through 88 perforated ft in Fort Apache between 1536 and 1676 ft (PI9-15-95). Ridgeway said preliminary analysis of the gasperformed by the U.S. Bureau of Mines in Amarillo, Texas—indicates it is composed of 89 percent CO2, 10 percent nitrogen, 0.7 percent helium and 0.1 percent each of methane and argon.

The 3-1 State 13-53-801 discovery is four miles south of Ridgeway's initial discovery in the area, which was completed last year at the 1 Ridgeway/Canstar-Plareau Cartle Co, se nw 15-12n-29e. The latter well produced CO2, helium and nitrogen from Supai at 1410-79 and 1680-1720 ft.

Carbon dioxide from the wells is to be utilized for growing hydroponic greenhouse vegetables in industrial parks now under development by Ridgeway Industries Inc. Both Ridgeway Industries and Ridgeway Arizona Oil are subsidiaries of Calgary-based Ridgeway Petroleum Corp.

The material and data contained herein have been compiled for the exclusive use of subscribers of Petroleum Information and no part hereof shall be reproduced, quoted or published in any manner without the written consent of Petroleum Information Corporation. Information presented in and used by Petroleum Information Services is obtained from operator sources but is not warranted as to its accuracy by the publishers.

Rocky Mountain Region Report (USPS 113-170). Price: \$1728 per year. "Northern Edition" Price: \$1464 per year. "Wyoming Edition" Price \$1454 per year. \*Four Corners-Intermountain Edition\* Price \$1068 per year. \*Southeastern Edition\* Price \$1068 per year. \*Newsletter Edition\* Price \$984 per year. Published daily except Saturday, Sunday and national holidays by Petroleum Information Corp, 1675 Broadway, Suite 700, Denver CO 80202. Second Class Postage paid at Denver CO 80202. Postmaster: Send address changes to: Rocky Mountain Region Report, P.O. Box 1702, Houston TX 77251-1702.





#### Fife Symington Governor

## State of Arizona Arizona Geological Survey

416 W. Congress, Suite 100 Tucson, Arizona 85701 (520) 770-3500



Larry D. Fellows Director and State Geologist

June 16, 1995

Mr. Clarence Bigelow County Manager Apache County P.O. Box 428 St. Johns, AZ 85936

Re: Ridgeway #35-1 State, Sec. 35-12N-29E, Apache County, Permit #890 Ridgeway #10-1 State, Sec. 10-11N-29E, Apache County, Permit #891 Ridgeway #11-1 State, Sec. 11-11N-29E, Apache County, Permit #892 Ridgeway #02-1 State, Sec. 02-11N-29E, Apache County, Permit #893

Dear Mr. Bigelow:

Copies of the approved applications to drill the referenced wells in Apache County are enclosed for your information.

These are being provided to you in accordance with a policy of the Arizona Oil and Gas Conservation Commission to keep County Governments informed about exploration and development drilling efforts in Arizona. These holes will confirm the extent of carbon dioxide reserves in this area.

The Commission issues permits to drill pursuant to A.R.S. § 27-516 after determining that the well is in compliance with all applicable rules and law and that public health and safety, correlative rights, and subsurface resources will not be compromised.

Do not hesitate to contact me if I may be of further assistance.

Sincerely,

Steven L. Rauzi

Oil and Gas Program Administrator

**Enclosures** 

c Commissioners Nations, Worthington, Clay, Lanshe, Veal

O





Fife Symington Governor

## Arizona Geological Survey

416 W. Congress, Suite 100 Tucson, Arizona 85701 (520) 770-3500



Larry D. Fellows Director and State Geologist

October 17, 1995

Mr. Walter B. Ruck, President Ridgeway Arizona Oil Corporation 1080, 700 4th Avenue S.W. Calgary, Alberta T2P 3J4

Re: Ridae

Ridgeway #35-1 State, Sec. 35-12N-29E, Apache County, Permit #890 Ridgeway #10-1 State, Sec. 10-11N-29E, Apache County, Permit #891 Ridgeway #11-1 State, Sec. 11-11N-29E, Apache County, Permit #892 Ridgeway #02-1 State, Sec. 02-11N-29E, Apache County, Permit #893

Dear Mr. Ruck:

Approved duplicate original Applications for Permit to Drill the referenced wells; Permits to Drill 890, 891, 892, 893; and filing fee receipts #3085, 3084, 3083, and 3082 are enclosed. Samples, logs, and completion report are required pursuant to A.A.C. R12-7-121. A copy of the Permit to Drill should be posted in a conspicuous place at the well site

These Permits are issued on the condition that you conduct operations substantially as outlined in the drilling programs submitted with the applications to drill and that you notify me at least 48 hours before you:

- 1) Commence drilling operations;
- 2) Run and cement surface casing; and
- 3) Nipple up and test the BOPE prior to drilling out of the surface casing.

The Oil and Gas Conservation Commission of the State of Arizona looks forward to successful completions of these wells.

Sincerely,

Stevent . Rowing

Steven L. Rauzi Oil & Gas Program Administrator

Enclosures

c Alan Emmendorfer, Farmington, New Mexico

R R 29E R 30E R

Co., Mfrs. Robinson's Legal Blanks, 1824-46 Stout St

i o magage

4)

No. 4B. TOWNSHIP PLAT. - Bradford-Robin

.

Four Township Island plat ( 1/2" to the mile)